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Service learning and health education: Innovation in nursing education

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Abstract

In an interdisciplinary service-learning project, students from the Universitat de Barcelona held a series of workshops and lectures for secondary-school students. Lectures related to healthcare and education were offered within the framework of Community Nursing, a 3rd-year subject in the bachelor's degree programme in Nursing. The objectives were to share knowledge between university students and secondary-school students on topics of mutual interest for their training, to develop health education skills and teamwork skills.

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1. Introduction

Within the framework of Community Nursing, a subject taught at the School of Nursing at the Universitat de Barcelona, students participated in the Compartir ideas (Share Ideas) project. Compartir ideas started in 2015 as a teaching innovation project (2015PID-UB/150) by ApS (UB), a service-learning working group at the Universitat de

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Barcelona. The working group is an interdisciplinary team of professors from different faculties that works to promote experiences in and recognition of service learning at the UB. The project represented a service-learning proposal that allowed students from different disciplines to participate under a common structure. It consisted of workshop lectures led by students from the UB on topics related to their studies. It was intended for students in high school and vocational training courses.

Service learning is a teaching and research proposal that includes community service and academic learning in a single project in which students gain training as they work to meet real needs in the environment with the aim of improving it (Tapia, 2001; Furco and Billing, 2002; Puig, 2009).

From this perspective, service learning is a good methodology for teaching innovation that incorporates social responsibility into higher education, provides a platform for practising civic engagement, and allows students to be directly involved in their communities (Jacoby, 1996; Martínez, 2008, Saltmarsh and Zlotkowski, 2011; Naval et. al., 2011).

One of the purposes of training nursing students is to enable them to care for and promote community health, which is understood to be all the strategies, methods and activities aimed at improving the population's health. The various definitions of health promotion are derived from complementary approaches to the factors and considerations that influence people's health. O'Donnel (2009) considered health promotion to be the art and science of helping people discover the synergies between desires and well-being, improving their motivation to strive and supporting them in making lifestyle changes to progress towards an optimal state. In this light, health education is a resource that combines individual, collective and social responsibility in sustaining behaviours and life conditions that promote health and quality of life (WHO, 1986, 1997). Group health education interventions are rooted in a participatory culture and foster reflection on the ethical dimension of the teaching-learning process (Pérez Calvo and Sáez Cárdenas, 2004). Health education processes are consistent with developing teamwork as a professional intervention strategy. Teamwork is considered to be important for providing safe and effective health services (Deneckere, Robyns, Vanhaecht et al., 2011).

2. Objectives

1. To learn concepts, abilities and attitudes based on community service by sharing knowledge with secondary-school students on topics of mutual interest for their training.
2. To acquire health education skills by participating in training young people in topics related to health and self-care.
3. To acquire teamwork skills based on collaborative participation in the project.

3. Methodology

The project consisted of conducting two types of workshop lectures in sub-groups of two people: one on the topic of basic life support (BLS) and the use of an automated external defibrillator (AED) and the other on the topic of good posture, stretching and relaxation.

The activities derived from the project were carried out in four phases, which were repeated during the two semesters of the year-long subject. There was an educational assessment of the various types of learning, as well as aspects of project development.

In phase one, the project was presented to students in Community Health, a third-year subject in the bachelor's degree programme in Nursing. It was offered as an optional project with a total of eight participants and would account for 20% of their mark. It consisted of conducting workshop lectures in sub-groups of two people, on the topic of basic life support (BLS) and the use of an automated external defibrillator (AED), and on the topic of good posture, stretching and relaxation.

Among the students who submitted an application, those with the best weighted average mark in their academic career were chosen. A personal interview was conducted to assess the extent to which the student's profile was suited to the project.

In phase two, the selected students gained more in-depth knowledge of the project and worked with a professor to plan its various subsequent phases. Each participant's commitment and teamwork methods were established.

During this phase, various activities were completed with the idea of learning to teach and gaining knowledge of the specific content of the workshop lecture.

In phase three, the students carried out the service activities. First, they went with the professor to visit the secondary schools, interviewed the head teachers and planned interventions. Second, they conducted workshop lectures with secondary-school students and recorded them for subsequent analysis and evaluation.

During the intervention period, which lasted one month, after each intervention, contact with the entire group of students and the professor was established by e-mail or WhatsApp. This was a platform for online mentoring and assessment of the suitability of any changes or adaptations for the next intervention.

Finally, in phase four, a mentoring session including a joint evaluation and finalisation of all the work done was held each semester. The project was successfully completed and methods were put forward for disseminating its results.

4. Results

The criteria for appraisal used and some partial results of the project are presented. These results are related to the types of learning done by the university students and the satisfaction of the secondary-school students and teachers as beneficiaries of the service.

The information is presented in terms of the two key elements of service learning.

4.1. Learning

The students were trained in the communication and public speaking skills required for suitable community service. This training was conducted jointly with students from other faculties. It was rated as “highly satisfactory” by all the participants from the various faculties.

For the students, the secondary school visit involved learning about aspects of planning health education projects: the students prepared the interview, the script of questions to ask the head teachers and the assessment of specific needs and resources at each institute. Interventions were then designed with the information collected. This learning was satisfactory and was evaluated by the professor through direct supervision of the students as they prepared and then conducted the interview and analysed the context.

The students performed a literature search which allowed them to choose content and prepare audio-visual presentations and documents to give to the secondary-school students on the days of the workshop lecture (explanatory leaflets, questionnaires to assess prior knowledge and questionnaires to assess the practice of ergonomic exercises and stretching). Furthermore, methods and techniques for health education were chosen according to content, the group for which the intervention was intended and the institutes’ resources, previously assessed on the visits.

Teamwork skills were developed with the understanding that these skills not only teach the individual to work as part of a team, but also improve the quality of the service provided.

The students engaged in prior practical learning of techniques of BLS and the use of an AED, and thus learned to do carry out these techniques, demonstrate them and guide secondary-school students in performing them as well. This required the participation of a teacher who was an expert in the topic and a simulated practice session with mannequins.

The students acquired skills in guiding the practical activity of the workshop lecture on ergonomics and relaxation.

During the process, an ongoing educational assessment was performed using various systems.

The professor of the subject evaluated the following by means of monitoring and supervision:

- The suitability of the content chosen by the students, the manner of preparing them to be taught and the health education techniques chosen. The evidence used by the students (articles analysed, clinical practice guidelines reviewed) was collected.
- Abilities in rehearsing for the interventions. With the collaboration of a specialist professor, abilities for the simulated practice session with mannequins were developed until the students obtained a suitable score on the checklist used to evaluate them.
- Abilities in interventions through recordings made by the participants during those interventions.

- The results of the intervention according to the assessment from the secondary-school students and professors, based on two ad hoc questionnaires.
- An individual journal in which each student narrated his or her reflections on the experience.
- The students' teamwork, through a rubric.

The university students evaluated the service-learning experience in two ways. The first consisted of an online self-assessment completed in pairs through a questionnaire designed by the ApS (UB) group. The questionnaire included questions on the four aspects indicated in Table 1. The group of students highlighted the following as strengths of the experience: ease of communication with the secondary-school students, given that the lectures were conducted in groups of 15 students and the workshops were conducted in groups of seven students, and the practical usefulness of the topic developed. They indicated the following as a weakness: conducting a single workshop lecture per group of secondary-school students, since they believed that this was not sufficient to acquire a good command of the abilities. All the students evaluated the experience as very useful for learning the subject, since learning for the purposes of teaching is very motivating and requires one to gain a great deal of in-depth knowledge in the topics.

Table 1. Self-assessment of the intervention

Strengths of the workshop lecture conducted
Weaknesses of the workshop lecture conducted
Assessment from 1 to 10 of the extent to which you found the experience useful for learning the subject
Explanation of the reason for the assessment above

The second type of evaluation was an overall self-assessment on their experience of learning and service in the final mentoring session through a discussion group. A recording was made and transcribed. In the discussion group, they were asked about the experience, in keeping with the pedagogical dynamism characteristics of the ApS. These questions appear in the script in Table 2. Some of the assessments made by the group are presented in the form of the following quotations:

4.2. Participation

“In this project we participated actively from the very beginning: gaining public speaking abilities, searching for information, preparing materials, holding rehearsals, conducting interventions, etc.” “We were the ones who managed what we learned. Of course, the professors helped us, but we could not show up at a mentoring session without preparing for it or visit the secondary school without knowing what to ask or let the day of the intervention arrive without rehearsing and being certain that we had a good command of the topic”

4.3. Teamwork

“In the beginning it was very difficult because we were a group that did not know each other and we had different working styles ... but once we got organised we started to improve.” “We worked well as a team and when there was a problem we fixed it.”

4.4. Reflection

“The fact that we were learning to teach others helped us achieve a very high level of knowledge, since we were responsible for conveying the information properly.”

“This system of gaining knowledge of content in advance and then teaching it helped us take it in better. So did conducting real interventions at the same time as learning the theory at university. This system provided us with beneficial experiences for our future professional development. The same was true of the health education strategies.”

“We felt very fulfilled throughout this experience for many reasons: we better assimilated knowledge

concerning the workshop and related to our discipline; we developed communication and teaching abilities which are very important in health education; we improved our abilities in conducting literature and database searches; we improved our teamwork abilities; and we gained conviction, confidence and judgement.”

“It helped me to see clearly and guide my professional future.”

“Doing just one workshop per class means that in a little while they will possibly have forgotten the steps of the resuscitation protocol. There should be reminders and it should to be extended to all secondary-school classes and courses.”

4.5. Feedback

“The fact that the professor was there, in the preparation phase and during the workshop, helped us to feel confident and make progress because mistakes could be corrected so that we could do better in the future.”

“Throughout the project we received feedback from the professor and as a result we learned more because the feedback motivated us and enabled us to continue improving.” “Her engagement and enthusiasm were contagious.”

Table 2. Overall self-evaluation of the ApS experience

Group discussion script
Participation: What is your assessment of your individual participation in the project?
Autonomy
Presentation of proposals to be developed
Thoughts on the mentoring sessions with the professor
Teamwork: What is your assessment of the support between each other in preparing and completing the activity?
Communication
Collaboration
Task planning
Time management
Reflection: What is your assessment of the process of reflection that you engaged in on completion of the project?
What is your opinion of the opportunities to think about what was being prepared, done and learned?
Preparation for what had to be done
Feelings during each part of the process
Social sense of the activity to be performed and its impact
Contribution to changing (as a student, as a future professional and as a person)
Recognition: What is your assessment of the professor's actions in letting you know that the activity that you were doing was being completed properly?
Recognition or positive reinforcement
Training value of the recognition

4.6. Service

There were five workshop lectures on BLS and the use of an AED and three workshop lectures on good posture, stretching and relaxation at an institute of secondary education in a neighbourhood close to the university campus, in the city of L'Hospitalet. One session involved participating in preparing a video to disseminate ApS's experiences at the Universitat de Barcelona.

At the secondary school, the participating students (158 students in high school and vocational training courses) and seven teachers performed evaluations through online questionnaires designed by the ApS (UB) group. The questionnaires assessed their degree of satisfaction with various aspects of the experience on a scale from 0 to 10,

where 0 was not at all satisfied and 10 was very satisfied. Tables 3 and 4 indicate the aspects evaluated, respectively, and the results.

Table 3. Evaluation by the secondary-school students

Satisfaction with the workshop lecture	Average score
Interest in the topic	8.5
Comprehension, learning and usefulness of the content	8.6
Ability of the lecturers	8.8
Methodology used	9
Overall satisfaction	8.8

Table 4. Evaluation by the secondary-school teachers

Satisfaction with the workshop lecture	Average score
Prior information received about the project	9
Extent to which the workshop lecture was suited to the needs of the student group	9.9
Extent to which the content of the workshop lecture was suited to course planning	9.9
Extent to which the content and methodology was suited to the group	10
Overall satisfaction	10

5. Conclusions

The university students' level of improvement of their knowledge, abilities and attitudes was excellent.

The methodology used allowed the students to simultaneously learn and provide an educational service to the community of secondary-school students, which was assessed as very satisfactory.

The objectives proposed at the start of the project were successfully achieved, owing largely to the substantial motivation that an intervention project entails.

The students assessed the experience of service learning as a great educational and personal experience; they recommended it to other students and hoped to continue engaging in it themselves in the next academic year while preparing their final project for their bachelor's degree.

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